

CLAIMS

1. A fibre having a maximum use temperature of 1200°C or more which comprises:-

$\text{SiO}_2 > 64.25 \text{ wt}\%$

$\text{CaO} > 18 \text{ wt}\%$

$\text{MgO} < 17 \text{ wt}\%$

and in which the amount of MgO in mol% is greater than the amount of CaO in mol % and in which the  $\text{SiO}_2$  excess as specified is no greater than 21.8mol%..

2. A fibre as claimed in claim 1 and comprising:-

$\text{CaO} < 21 \text{ wt}\%$ .

3. A fibre as claimed in claim 2 and comprising:-

$\text{CaO} < 20.5 \text{ wt}\%$ .

4. A fibre as claimed in any of claims 1 to 3 and comprising:-

$\text{CaO} > 19 \text{ wt}\%$ .

5. A fibre as claimed in claim 4 and comprising:-

$\text{CaO} > 19.5 \text{ wt}\%$

6. A fibre as claimed in any of claims 1 to 4 and comprising:-

$\text{MgO} > 14.25 \text{ wt}\%$ .

7. A fibre as claimed in claim 6 and comprising:-

$\text{MgO} > 14.75 \text{ wt}\%$ .

8. A fibre as claimed in claim 7 and comprising:-  
MgO > 15.25 wt %.

9. A fibre as claimed in any preceding claim and comprising:-  
MgO < 16 wt %.

10. A fibre as claimed in any preceding claim and comprising:-  
SiO<sub>2</sub> 65 ± 0.5 wt%  
CaO 20 ± 0.5 wt%  
MgO 15 ± 0.5 wt%.

11. A fibre as claimed in any of claims 1 to 9 and comprising:-  
SiO<sub>2</sub> 64.5 - 64.7 wt%  
CaO 19.5 - 20.2 wt%  
MgO 15.5 - 15.6 wt%.

12. A fibre as claimed in any preceding claim and comprising:-  
SiO<sub>2</sub> about 65 wt%  
CaO about 19.5 wt%  
MgO about 15.5 wt%.

13. A fibre as claimed in any preceding claim and consisting essentially of:-  
CaO 18.7 to 20.2wt%  
MgO 14.47 to 15.9wt%  
SiO<sub>2</sub> 64.5 to 65.1wt%  
Al<sub>2</sub>O<sub>3</sub> 0 to 0.56wt%